Reliability and safety

Programmable Electronic Control Unit
EBH-08 Series

Electronic solutions for mobile applications

Flexible hardware and software architecture

Main features

- Single/Dual microcontroller
- Flexible hardware configuration to fulfil the required functions and to optimize the product cost.
- Double opto isolated can bus, available.
- RS232 interface for standard applications, available.
- Sealed with resin for maximum protection
- C/C++ programmable.
- Suitable for MATLAB automatic code generation.
- Up to HW category 2
- MTTFd = 72 y

Applications

- Material handling
- Agriculture
- Construction Equipment
- Industrial
- Forestry

Technical Data

Main microcontroller	32 bit RISC 80 MHz
Safety microcontroller	16 bit F²MC 32 MHz
Memory	2KB EEPROM
Supply	8-30 V dc
Operative temperature range	-40 to +85° C
Protection class	IP67
Dimensions (DxHxW)	142x28x127 mm
Connector	48 Pin JST S48B-ZROK

INPUTs:

4x Digital NPN-PNP

10x Analog

2x Frequency (NPN sensors, up to 5 kHz)

OUTPUTs:

1x Vsupply 5V@300mA@85° C → 500mA@70° C

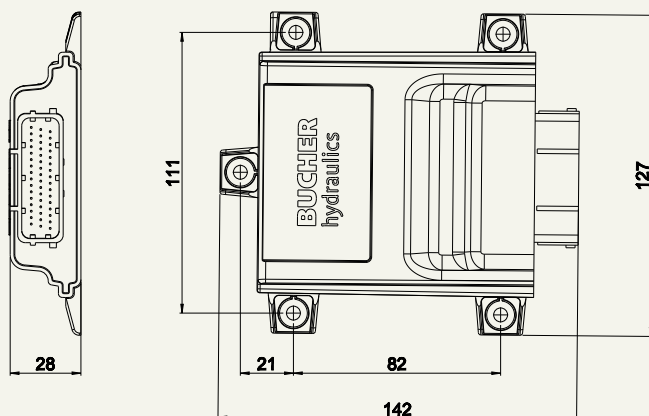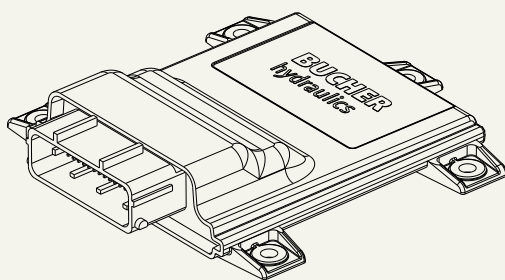8x PWMi up to 3A, 1% accuracy, up to 300Hz
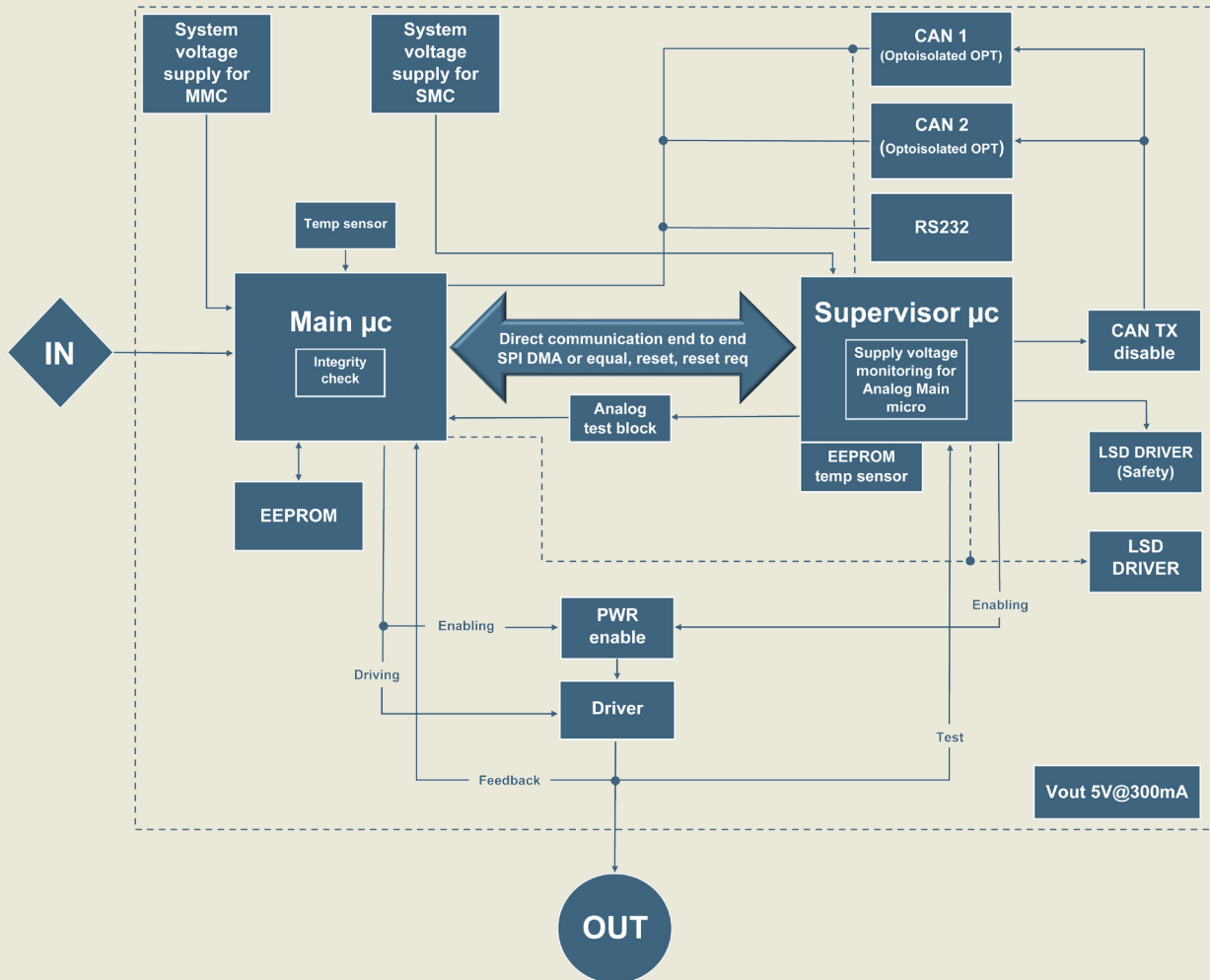
2x LSD 200 mA (optional)

COMs:

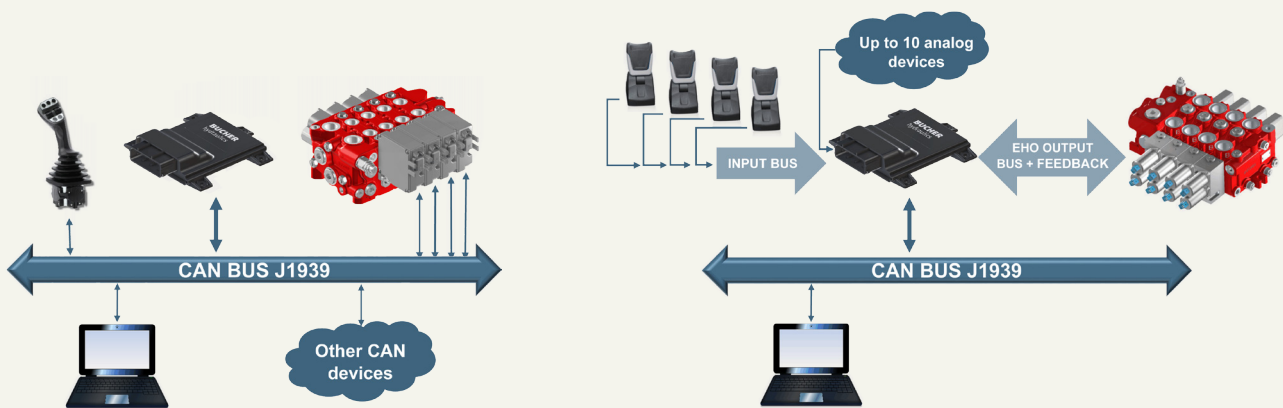2x CAN BUS high speed (opto isolation as options)

1x RS232 (optional)

Dimensions

28

111

21   82

142

127

BUCHER hydraulics

Reference schematic

- System voltage supply for MMC
- System voltage supply for SMC
- CAN 1 (Optoisolated OPT)
- CAN 2 (Optoisolated OPT)
- RS232
- Temp sensor
- **Main µc**
  - Integrity check
- Direct communication end to end SPI DMA or equal, reset, reset req
- **Supervisor µc**
  - Supply voltage monitoring for Analog Main micro
- CAN TX disable
- Analog test block
- EEPROM temp sensor
- LSD DRIVER (Safety)
- EEPROM
- LSD DRIVER
- IN
- Enabling
- PWR enable
- Enabling
- Driving
- Driver
- Test
- Feedback
- Vout 5V@300mA
- OUT

Application example: CAN BUS

CAN BUS J1939

Other CAN devices

Application example: analog

Up to 10 analog devices

INPUT BUS

EHO OUTPUT BUS + FEEDBACK

CAN BUS J1939

Application example: hybrid

Other CAN open devices

CAN open

INPUT BUS

BUCHER hydraulics

EHO OUTPUT BUS + FEEDBACK

Up to 10 analog devices

CAN BUS J1939

Other CAN devices
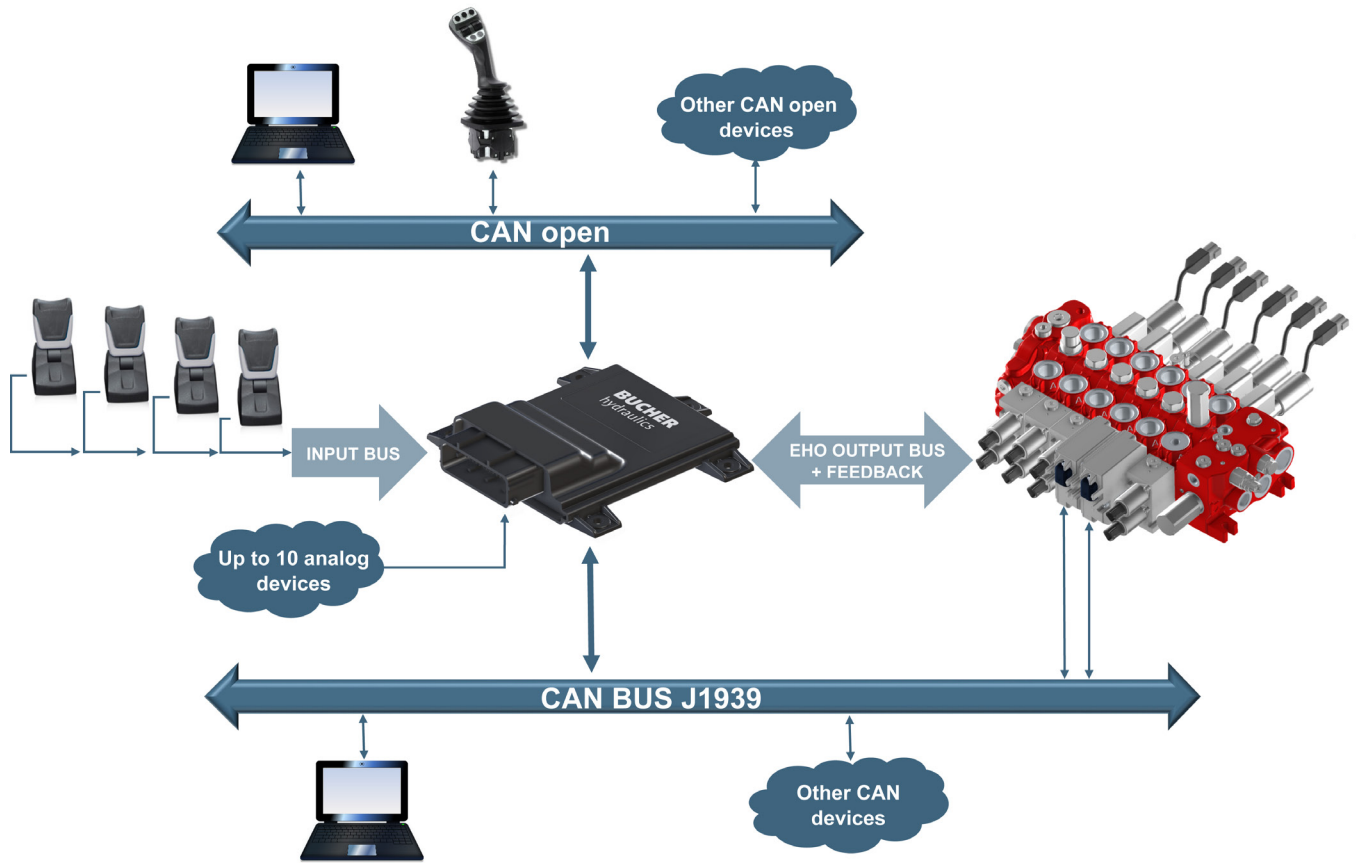
Applications

Smart Solutions.
Superior Support.